



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/569,829

02/28/2006

Jun Fujikami

017700-0184

5400

23392 7590 01/22/2009

FOLEY & LARDNER  
2029 CENTURY PARK EAST  
SUITE 3500  
LOS ANGELES, CA 90067

EXAMINER

CAZAN, LIVIUS RADU

ART UNIT

PAPER NUMBER

3729

MAIL DATE

DELIVERY MODE

01/22/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/569,829	<b>Applicant(s)</b> FUJIKAMI ET AL.	
	<b>Examiner</b> LIVIOUS R. CAZAN	<b>Art Unit</b> 3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 5-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 5-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/9/2008 has been entered.

### ***Priority***

2. The certified copy of the priority documents has been received.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 7 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

5. Specifically, claims 7 and 10 are grammatically incorrect, and it is unclear exactly what is being claimed, since no relationship is recited between the dry air in claims 7 and 10 and any other claimed structural elements. Applicants have attempted to overcome this rejection, but the claims are still unclear. For example, claim 7 recites "wherein providing dry air with a dew point at atmospheric pressure of less than or equal to -20° C during the at least one interval of less than seven days", this recitation not

Art Unit: 3729

forming a complete sentence. First of all, the step of “providing dry air” lacks proper antecedent basis. Second, even if claim 1 provided a proper antecedent basis, claim 7 merely mentions this step, but fails to further elaborate. As a simplified analogy, claim 7 essentially recites “The method of claim 1, wherein providing X.” Claim 10 is similarly deficient. **The claims will be rejected as best understood.**

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. **Claims 1, 3, 6, 7, and 9-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Kobayashi (US6601289).**

8. **Regarding claims 1, 3, 13, and 14**, Kobayashi discloses (see Example 12, col. 18) forming a wire by coating raw material powder for a superconductor with a metal (see col. 15, Ins. 1-3), drawing the wire (see col. 15, Ins. 3-7), performing a first rolling (see col. 15, Ins. 3-7), performing a first heat treatment (i.e. sintering), followed by a second rolling, and a second heat treatment (see col. 18, Ins. 15-20). Kobayashi discusses the gradual increasing of temperature up to the temperature of the heat treatments, and specifically discusses an increase over the range 100 to 300 degrees C (see col. 18, Ins. 26-52, especially Ins. 33-36 and 45-52; see Table 1).

Art Unit: 3729

9. **Regarding claims 6, 7, 9, and 10**, it is readily apparent that at some point between providing the wire and rolling it or between a rolling step and a sintering step the wire would be held under normal atmosphere, i.e. water vapor together with dry air having the specified dew point and comprising nitrogen and argon (see the rejection under 35 U.S.C. 112, second paragraph).

10. **Regarding claims 11 and 12**, the claims do not specify which rolling step is intended. For claim 11, the reference is reinterpreted, such that the rolling performed between the first and second heat treatment is the claimed rolling. Therefore, the claim limitations are met, since there is such a temperature as claimed, between the drawing and the rolling. With respect to claim 12, claim 3 recites "rolling the wire n times". Since some of the rolling steps are performed after sintering steps, it would appear from the claim that the claimed temperature range must exist in an interval between the drawing and at least one of the rolling steps, and, as discussed above, this is so.

***Claim Rejections - 35 USC § 103***

11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

12. **Claims 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi.**

13. Kobayashi discloses substantially the claimed invention, except for the wire being held in a container at a reduced atmosphere, as claimed.

14. However, in a different example, Kobayashi discloses conducting heat treatment in a reduced atmosphere (see Example 11, in cols. 17 and 18), thereby reducing the

Art Unit: 3729

number of blisters, by creating an environment where a gas is easily evacuated to the outside of the superconducting wire.

15. Since both the embodiment of Example 12 and that of Example 11 are concerned with reducing the number of blisters, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of both embodiments, to thereby further reduce the number of blisters. It is readily apparent that creating such an environment requires a container.

### ***Double Patenting***

16. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 3 of copending Application No. 10/568,537. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 3 of the '537 application anticipates claim 1 of the present application. See the *Response to Arguments* below.

17. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Response to Arguments***

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

18. Applicant's arguments with respect to the double patenting rejection have been fully considered but they are not persuasive.

19. Applicants argue "Claims 1 and 3 as amended recite [...] maintaining the wire temperature greater than or equal to 80°C and less than or equal to 300°C during the at

Art Unit: 3729

least one interval of less than seven days [and that] [c]laims 3 and 9 of the '573 application fail to recite at least the above features.”

20. The Examiner respectfully disagrees. The latest amendment (filed 11/25/2008) of the claims in the '573 application adds the limitation “wherein during the at least one interval the wire is held at a temperature greater than or equal to 80°C and less than or equal to 300°C” to claim 1. Therefore, claim 3 of the '537 application anticipates claim 1 of the present application, for interval lengths between 72 hours and seven days.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LIVIUS R. CAZAN whose telephone number is (571) 272-8032. The examiner can normally be reached on M-F 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DAVID P. BRYANT can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3729

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. Dexter Tugbang/  
Primary Examiner  
Art Unit 3729

/L. R. C./ 1/20/2009  
Examiner, Art Unit 3729